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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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TITLE:

SYSTEM, DEVICE AND METHOD FOR VENTILATION

AMENDED CLAIMS

- 1. (currently amended) A system for ventilating a room having walls (103), a floor (107) and a ceiling (105), and being capable of housing a patient's bed (140). comprising at least one air supply unit (120) and one air exhaust unit (130), characterised in that said air supply unit (120) comprises a guiding slot diffuser (122) for guiding an airstream in a certain direction, such that a patient (150), lying down in said bed on his back, receives said airstream, and that said exhaust unit (130) is arranged near the floor (107) and near a head end (141) of the bed (140) such that air is arranged to leave the room after having ventilated the patient (150), said air supply unit (120) also comprises an air outlet (305,306) devised to supply air at a lower velocity but with a larger volume than the air passing through the diffuser (122), and in that said system also comprises at least one main diffuser (305,306) comprising perforated sheet (305,306) and arranged such that a first airflow through the slot diffuser (122) having a first velocity co-ejects a second airflow having a second velocity through the main diffuser (305,306), said second velocity being lower than said first velocity, such that the combined flow assumes substantially the direction of the first flow, and in that the longitudinal direction of at least one slot (301,302) in the diffuser (120) is lying in a plane which is parallel to a vertical plane parallel with a left or right side of the bed in which the patient is lying.
- 2. (currently amended) A system as recited in claim 1, characterised in that wherein said guiding slot diffuser (122) is provided with a booster fan (124) for driving air through the diffuser (122).
- 3. (currently amended) An air supply unit (120) for providing conditioned air to a patient lying in a bed, characterised by comprising: a booster fan (124), arranged to force air through a guiding slot diffuser (122) for guiding an airstream in a certain

direction, said diffuser having at least one slot (301,302), and one area of perforated sheet (305), being arranged at an outlet side of said diffuser.

- 4. (currently amended) An air supply unit (120) as recited in claim 4, characterised in that claim 3, wherein said diffuser has two slots (301,302) and areas of perforated sheet arranged in close proximity of the slots such that an airstream, comprising air passing through both the perforated sheet (305,306) and the diffuser slots (301,302), assumes a direction (D) as controlled by the direction of the diffuser slots.
- 5. (currently amended) An air supply unit (120) as recited in claim 5, characterised in that claim 4, wherein said diffuser slots (301,302) form an angle [[a]] to a base plane 160 of said supply unit (120) such that air is guided obliquely down towards the patient (150).
- 6. (currently amended) An air supply unit (120) as recited in claim 5, characterised in that wherein said base plane 160 is arranged horizontal.
- 7. (currently amended) An air supply unit (120) as recited in claim 6, characterised in that wherein said angle [[A IS]] is between 5 and 15 degrees.
- 8. (currently amended) An air supply unit (120) as recited in claim 7, characterised in that wherein said diffuser slots (301,302) are adjustable sideways to enable setting the direction [[D]] of the airstream.
- 9. (currently amended) An air supply unit (120) as recited in claim 3, where wherein each slot has a length, a width and a depth (DT), characterised in that wherein the depth (DT) is substantially larger than the width.
- 10. (currently amended) An air supply unit (120) as recited in claim 9, characterised in that wherein the depth (DT) is ten to twenty times larger than the width.
- 11. (currently amended) An air supply unit (120) as recited in claim 10, characterised in that wherein the width is approximately 2 mm.

- 12. (currently amended) An air supply unit (120) as recited in claim 9, having two slots (301,302), characterised in that an angle (GAMMA) is formed between the depth axes (361,362) of each slot (301,302).
- 13. (currently amended) An air supply unit (120) as recited in claim 12, characterised in that wherein the angle (GAMMA) between the depth axes (361,362) is arranged to be adjustable.
- 14. (currently amended) An air supply unit (120) as recited in claim 12, characterised in that wherein the angle (GAMMA) between the depth axes (361,362) is arranged to be 10 degrees.
- 15. (currently amended) An air supply unit (120) as recited in claim 4, characterised in that it comprises further comprising light tubes and corresponding reflectors for providing adequate lighting to a bed area of the room.
- 16. (currently amended) A portable air conditioning unit (500), characterised in that, wherein said conditioning unit (500) comprises at least one main diffuser (520,521) and at least one slot diffuser (530) arranged such that a first airflow through the slot diffuser (530) having a first velocity co-ejects a second airflow through the at least one main diffuser (520,521) having a second velocity lower than said first velocity.
- 17. (currently amended) A portable air conditioning unit (500) as recited in claim 16, characterised in that wherein a combined airflow, being the result of said first and second airflow, assumes the direction of the airflow through the slot diffuser (530).
- 18. (currently amended) A portable air conditioning unit (500) as recited in claim 16, characterised in that wherein said slot diffuser is arranged in a meeting corner (620) of said main diffusers.
- 19. (currently amended) A portable air conditioning unit (500) as recited in claim 18, characterised in that wherein an angle [[P]] between two main diffusers is between 80 and 110 degrees.
- 20. (currently amended) A portable air conditioning unit (500) as recited in claim 16, characterised in that wherein said unit (500) comprises a slot diffuser unit having two

slots with an acute angle (GAMMA) between said slots'depth axes depth axes of said two slots.

- 21. (currently amended) A portable air conditioning unit (500) as recited in claim 19, characterised in that wherein each slot is provided with a depth substantially larger than its a width of the slot.
- 22. (currently amended) A unit (500) as recited in claim 21, characterised in that said width of the slot is approximately 2 mm.
- 23. (original) A method for supplying fresh air to a patient lying in a bed in a room comprising the following steps:

providing a first, relatively fast flow of air, relatively small in volume;

providing a second, relatively slow flow of air, relatively large in volume, and adjacent to the first flow of air such that said first flow of air co-ejects air from the second flow; and

providing a low speed large volume suction for evacuating the supplied air.

24. (currently amended) A method as recited in claim 23, further comprising the steps of:

providing the first flow of air by forcing air through at least one elongated slot parallel to a vertical plane parallel to said bed's left or right a side of said bed; and

providing the second flow of air by forcing air through a perforated sheet of metal or similar material having a hole content of approximately 30 %.

25. (original) A method as recited in claim 24 further comprising the steps of:

providing the first flow of air by forcing air through two elongated slots having converging axes of depth; and

providing the second flow of air with an air speed of less than 5 % of the air speed of the first flow and with a volume flow of more than double the volume flow of the first flow.